

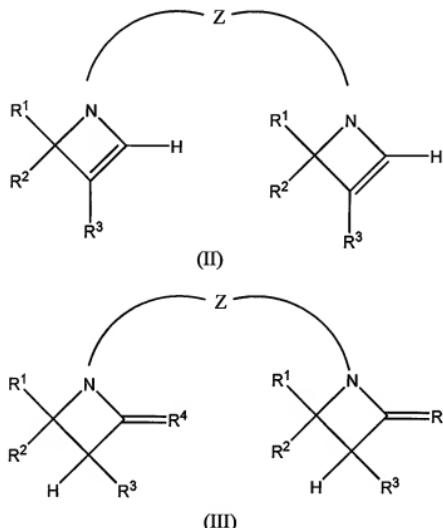
Application No. 10/581,624  
AMENDMENT UNDER 37 C.F.R. 1.312 AND  
REPLY TO NOTICE OF ALLOWANCE

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An azetidine derivative of the general formula (II) or (III)



where

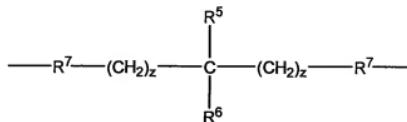
R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> independently of one another are H, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>3</sub>-C<sub>8</sub> cycloalkyl,

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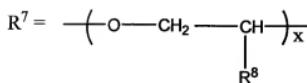
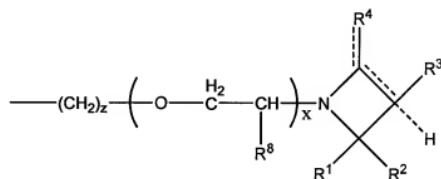
C<sub>6</sub>-C<sub>10</sub> aryl or alkylaryl with C<sub>1</sub>-C<sub>4</sub> alkyl and C<sub>6</sub>-C<sub>10</sub> aryl groups

R<sup>4</sup> = H, or C<sub>1</sub>-C<sub>6</sub> alkyl (idene)

Z = C<sub>2</sub>-C<sub>25</sub> alkylidene, C<sub>5</sub>-C<sub>25</sub> cycloalkylidene, C<sub>6</sub>-C<sub>24</sub> arylene or



R<sup>5</sup> and R<sup>6</sup> = H, CH<sub>2</sub>OH, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>6</sub>H<sub>5</sub> or



R<sup>8</sup> = H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, or C<sub>6</sub>H<sub>5</sub>

z = 0 or 1

x = 0 to 100.

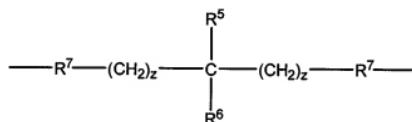
2. (Canceled)

3. (Canceled)

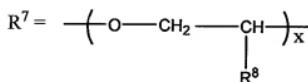
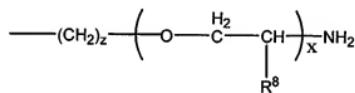
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4. (Currently Amended) A method for producing an azetidine derivative of claim 1, wherein a polyamine of the formula  $\text{NH}_2\text{-Z}'\text{-NH}_2$  is reacted with an  $\alpha,\beta$ -unsaturated aldehyde of the formula  $\text{R}^1\text{R}^2\text{-C=CR}^3\text{CHO}$  or with an  $\alpha,\beta$ -unsaturated ketone of the formula  $\text{R}^1\text{R}^2\text{C=CR}^3\text{-COR}^4$  in the temperature range from 20 to 150°C, where  $Z'$  is

$\text{C}_2\text{-C}_{25}$  alkylidene,  $\text{C}_5\text{-C}_{25}$  cycloalkylidene,  $\text{C}_6\text{-C}_{24}$  arylene, and or



$\text{R}^5$  and  $\text{R}^6 = \text{H}, \text{CH}_2\text{OH}, \text{C}_1\text{-C}_4$  alkyl,  $\text{C}_6\text{H}_5$ , or



$\text{R}^8 = \text{H}, \text{CH}_3, \text{C}_2\text{H}_5$ , or  $\text{C}_6\text{H}_5$

$z = 0$  or 1

$x = 0$  to 100

$\text{R}^1, \text{R}^2$  and  $\text{R}^3$  independently of one another are  $\text{H}, \text{C}_1\text{-C}_{20}$  alkyl,  $\text{C}_3\text{-C}_8$  cycloalkyl,  $\text{C}_6\text{-C}_{10}$  aryl or alkylaryl with  $\text{C}_1\text{-C}_4$  alkyl and  $\text{C}_6\text{-C}_{10}$  aryl groups;

$\text{R}^4 = \text{H},$  or  $\text{C}_1\text{-C}_6$  alkyl (idene).

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5. (Previously Presented) The method of claim 4, wherein the reaction is carried out in the presence of an organic solvent.

6-11. (Canceled)